Contents to volume 291

Discussion Letter

Factors contributing to the inhibition of HIV reverse transcriptase by chain-terminating nucleotides in vitro and in vivo (FEBS 10226) *R.S. Goody, B. Müller, T. Restle* 1

Research Letters

Nuclear localization of budgerigar fledgling disease virus capsid protein VP2 is conferred by residues 308–317 (FEBS 10201) *H.-P. Rihs, R. Peters, G. Hobom* 6

Possible involvement of GTP-binding proteins in growth regulation of human epidermoid carcinoma cell line A431 (FEBS 10204) *N. Masuda, M. Ui* 9

Reconstitution of the solubilized cardiac sarcoplasmic reticulum potassium channel: Identification of a putative M_r ~80 kDa polypeptide constituent (FEBS 10205) *Q.-Y. Liu, F.A. Lai, W.K. Shen, G. Meissner, H.C. Strauss* 13

Activation of respiration and loss of thermodynamic control in hyperthyroidism: Is it due to increased slipping in mitochondrial proton pumps? (FEBS 10210) *S. Luvisetto, I. Schmehl, E. Conti, E. Intravaia, G.F. Azzone* 17

Hydrogen bonding effects on ^{31}P NMR shielding in the pyrophosphate group of NADPH bound to *L. casei* dihydrofolate reductase (FEBS 10203) *I.P. Gerothanassis, B. Birdsall, J. Feeney* 21

Calponin: Developmental isoforms and a low molecular weight variant (FEBS 10220) *A. Draeger, M. Gimona, A. Stuckert, J.E. Celis, J.V. Small* 24

Use of a monoclonal antibody (APE-1) directed against the conserved GTPEYLAPE motif present in protein kinases as an affinity purification reagent (FEBS 10218) *C.H. Hagedorn* 29

The amino acid sequence of AQN-3, a carbohydrate-binding protein isolated from boar sperm: Location of disulphide bridges (FEBS 10221) *L. Sanz, J.J. Calvete, K. Mann, W. Schäfer, E.R. Schmid, E. Töpfer-Petersen* 33

Cloning and sequence analysis of pituitary cDNA encoding the β-subunit of *Xenopus* proteasome (FEBS 10222) *M.C.H.M. Van Riel, G.J.M. Martens* 37

Evidence for an NO-rebound mechanism for production of N_2O from nitrite by the copper-containing nitrite reductase from *Achromobacter cycloclastes* (FEBS 10224) *M.A. Jackson, J.M. Tiedje, B.A. Averill* 41

Structural and functional analysis of *Trichoderma reesei* endoglucanase I expressed in yeast *Saccaromyces cerevisiae* (FEBS 10223) *S. Aho* 45

Arg–Gly–Asp constrained within cyclic pentapeptides: Strong and selective inhibitors of cell adhesion to vitronectin and laminin fragment P1 (FEBS 10215) *M. Aumailley, M. Gurrath, G. Müller, J. Calvete, R. Timpl, H. Kessler* 50

Remarkably enhanced expression of the type II hexokinase in rat hepatoma cell line AH130 (FEBS 10227) *Y. Shinohara, J. Ichihara, H. Terada* 55

Augmentation of haptoglobin production in Hep3B cell line by a nuclear factor NF-IL6 (FEBS 10232) *S. Natsuka, H. Isshiki, S. Akira, T. Kishimoto* 58

Sphingosine and unsaturated fatty acids modulate the base exchange enzyme activities of rat brain membranes (FEBS 10228) *J.N. Kanfer, D. McCartney* 63

Acidic pentapeptide phosphorylated in vitro by calf thymus protein kinase NII binds to DNA in the presence of Mg^{2+} cations (FEBS 10233) *F. Chillemi, G. Lugaro, D. Boari, E. Cardellini, M. Bramucci, A. Miano, D. Amici, G.L. Gianfranceschi, E. Durban* 67

Mycoplasma Gallisepticum strain S6 genome contains three regions hybridizing with 16 S rRNA and two regions hybridizing with 23 S and 5 S rRNA (FEBS 10234) *A. Scamrov, R. Beabealashvilli* 71

Molecular cloning and primary structure of *Thermoactinomyces vulgaris* carboxypeptidase T: A metalloenzyme endowed with dual substrate specificity (FEBS 10236) *S.V. Smulevitch, A.L. Osterman, O.V. Galperina, M.V. Matz, O.P. Zagnitko, R.M. Kadyrov, I.A. Tsaplina, N.V. Grishin, G.G. Chestukhina, V.M. Stepanov* 75

Calcium influx through 'L'-type channels into rat anterior pituitary cells can be modulated in two ways by protein kinase C (PKC-isoform selectivity of 1,2-dioctanoyl *sn*-glycerol?) (FEBS 10235) *D.J. MacEwan, R. Mitchell* 79

Respiratory burst inhibition in human neutrophils by ultra-low doses of [D-Ala^2]methionine enkephalinamide (FEBS 10237) *S.V. Zaitsev, L.A. Sazanov, A.A. Koshkin, G.F. Sud'ina, S.D. Varfolomeev* 84

A leucine-rich repeat peptide derived from the *Drosophila* Toll receptor forms extended filaments with a β-sheet structure (FEBS 10241) *N.J. Gay, L.C. Packman, M.A. Weldon, J.C.J. Barna* 87

Chromaffin granule H^+-ATPase has F_1-like structure (FEBS 10238) *Y. Moriyama, A. Yamamoto, Y. Tashiro, M. Futai* 92

Regions in the promoter of the yeast *FBP1* gene implicated in catabolite repression may bind the product of the regulatory gene *MIG1* (FEBS 10244) *J.J. Mercado, O. Vincent, J.M. Gancedo* 97

Amylin injection causes elevated plasma lactate and glucose in the rat (FEBS 10225) *A.A. Young, M.-W. Wang, G.J.S. Cooper* 101

Okadaic acid stimulates carnitine palmitoyltransferase I activity and palmitate oxidation in isolated rat hepatocytes (FEBS 10229) *M. Guzmán, J. Castro* 105

Syringopeptins, new phytotoxic lipodepsipeptides of *Pseudomonas syringae* pv. *syringae*[a] (FEBS 10231) *A. Ballio, D. Barra, F. Bossa, A. Collina, I. Grgurina, G. Marino, G. Moneti, M. Paci, P. Pucci, A. Segre, M. Simmaco* 109

Interference of Ha-*ras* with inositol trisphosphate-mediated Ca^{2+}-release (FEBS 10245) *K. Maly, A. Kiani, H. Oberhuber, H. Grunicke* 113

Phytochrome control and anoxia effect on the activity and expression of soybean seedling lipoxygenases 1 and 2 (FEBS 10230) *M. Maccarrone, G.A. Veldink, J.F.G. Vliegenthart* 117

Association of a 24-kDa GTP-binding protein, G_n24, with human platelet α-granule membranes (FEBS 10246) *J. van der Meulen, R.P. Bhullar, K.-A. Chancellor-Maddison* 122

Two antifungal thaumatin-like proteins from barley grain (FEBS 10261) *J. Hejgaard, S. Jacobsen, I. Svendsen* 127

cDNA cloning of a human androgen-induced mRNA exhibiting an early and protein synthesis-independent induction (FEBS 10242) *A.A. Colletta, T. Kealey* 132

Synchronous free Ca^{2+} changes in individual neutrophils stimulated by leukotriene B_4 (FEBS 10239) *E.V. Davies, A.K. Campbell, M.B. Hallett* 135

A new class of anti-HIV agents: GAP31, DAPs 30 and 32 (FEBS 10240) *S. Lee-Huang, H.-f. Kung, P.L. Huang, P.L. Huang, B.-Q. Li, P. Huang, H.I. Huang, H.-C. Chen* 139

Widespread tissue distribution, species distribution and changes in activity of Ca^{2+}-dependent and Ca^{2+}-independent nitric oxide synthases (FEBS 10243) *M. Salter, R.G. Knowles, S. Moncada* 145

Published by Elsevier Science Publishers B.V.

Activation of protein kinase C results in down-modulation of different recombinant $GABA_A$-channels (FEBS 10281) *E. Sigel, R. Baur, P. Malherbe* 150

Comment: di(1,N^6-ethenoadenosine)-5′,5‴-P^1,P^4-tetraphosphate, a fluorescent enzymatically active derivative of Ap_4A (FEBS 10249) *A.G. McLennan* 153

Reply to McLennan's comment (FEBS 10250) *P. Rotllán* 154

Book Reviews, Booklist 103 155

Research Letters

POMC gene expression in mouse and hamster melanoma cells (FEBS 10247) *A. Slominski* 165

Effects of lonidamine on the membrane electrical properties of Ehrlich ascites tumor cells (FEBS 10248) *M.T. Santini, C. Cametti, P.L. Indovina, W. Malorni, M. Benassi, F.P. Gentile, S. Castiglione, A. Floridi* 169

Cytotoxicity of, and DNA damage by, active oxygen species produced by xanthine oxidase (FEBS 10252) *M. Chiricolo, P.L. Tazzari, A. Abbondanza, A. Dinota, M.G. Battelli* 173

Posttranscriptional regulation of c-myc RNA during early development of *Xenopus laevis* (FEBS 10253) *F. Tchang, S. Vriz, M. Méchali* 177

Interleukin-4 inhibits the differentiation of mouse myeloid leukemia M1 cells induced by dexamethasone, D-factor/leukemia inhibitory factor and interleukin-6, but not by 1α,25-dihydroxyvitamin D_3 (FEBS 10254) *T. Kasukabe, J. Okabe-Kado, Y. Honma, M. Hozumi* 181

Interaction of the duplicated segment carried by *Clostridium thermocellum* cellulases with cellulosome components (FEBS 10255) *K. Tokatlidis, S. Salamitou, P. Béguin, P. Dhurjati, J.-P. Aubert* 185

A novel P-type ATPase from yeast involved in sodium transport (FEBS 10251) *R. Haro, B. Garciadeblas, A. Rodríguez-Navarro* 189

Isolation of mitotic $p34^{cdc2}$ apoenzyme from human cells (FEBS 10258) *W. Meikrantz, R.P. Feldman, M.M. Sladicka, D. Ho, J. Krupnick, K. Anderson, R.A. Schlegel* 192

$^{8-37}$h-CGRP antagonizes actions of amylin on carbohydrate metabolism in vitro and in vivo (FEBS 10256) *M.-W. Wang, A.A. Young, T.J. Rink, G.J.S. Cooper* 195

Antiviral activity of some natural and synthetic sugar analogues (FEBS 10257) *R. Huang, E. Dietsch, O. Lockhoff, M. Schüller, W. Reutter* 199

Mitogenic signal transduction in normal and transformed 32D hematopoietic cells (FEBS 10259) *M. Ruggiero, L.M. Wang, J.H. Pierce* 203

Functional expression of a human C5a receptor clone in *Xenopus* oocytes requires additional RNA (FEBS 10264) *B. Kroll, M. Emde, A. Jeromin, L. Penner, G. Rechkemmer, T. Kretzschmar, A. Klos, J. Köhl, W. Bautsch* 208

Cloning of segment polarity gene homologues from the unsegmented brachiopod *Terebratulina retusa* (Linnaeus) (FEBS 10265) *P.W.H. Holland, N.A. Williams, J. Lanfear* 211

Co-amplification and over-expression of two *mdr* genes in a multidrug-resistant human colon carcinoma cell line (FEBS 10266) *C.C.-K. Chao, C.M. Ma, S. Lin-Chao* 214

Purification and subunit composition of a GTP-binding protein from maize root plasma membranes (FEBS 10269) *S.V. Bilushi, A.G. Shebunin, A.V. Babakov* 219

Protein aggregation and inclusion body formation in *Escherichia coli rpoH* mutant defective in heat shock protein induction (FEBS 10270) *A.I. Gragerov, E.S. Martin, M.A. Krupenko, M.V. Kashlev, V.G. Nikiforov* 222

Acetylcholine interactions with tryptophan-184 of the α-subunit of the nicotinic acetylcholine receptor revealed by transferred nuclear Overhauser effect (FEBS 10292) *Y. Fraenkel, J.M. Gershoni, G. Navon* 225

Hepatocyte growth factor has potent anti-proliferative activity in various tumor cell lines (FEBS 10294) *H. Tajima, K. Matsumoto, T. Nakamura* 229

ADPG formation by the ADP-specific cleavage of sucrose-reassessment of sucrose synthase (FEBS 10291) *J. Pozueta-Romero, J. Yamaguchi, T. Akazawa* 233

Dexamethasone induces the expression of the mRNA of lipocortin 1 and 2 and the release of lipocortin 1 and 5 in differentiated, but not undifferentiated U-937 cells (FEBS 10298) *E. Solito, G. Raugei, M. Melli, L. Parente* 238

Molecular cloning and sequence analysis of cDNA and genomic DNA for the human cone transducin α subunit (FEBS 10295) *M. Kubo, T. Hirano, M. Kakinuma* 245

PDGF suppresses the activation of group II phospholipase A_2 gene expression by interleukin 1 and forskolin in mesangial cells (FEBS 10296) *H. Mühl, T. Geiger, W. Pignat, F. Märki, H. Van de Bosch, K. Vosbeck, J. Pfeilschifter* 249

Cloning and tissue-specific expression of the brain calcium channel β-subunit (FEBS 10297) *M. Pragnell, J. Sakamoto, S.D. Jay, K.P. Campbell* 253

A coupled in vitro transcription–translation system for the exclusive synthesis of polypeptides expressed from the T7 promoter (FEBS 10299) *D.E. Nevin, J.M. Pratt* 259

Site-directed mutagenesis of the N-terminal region of IGF binding protein 1; analysis of IGF binding capability (FEBS 10300) *A. Brinkman, D.J. Kortleve, A.G.P. Schuller, E.C. Zwarthoff, S.L.S. Drop* 264

Metabolic regulation of the trehalose content of vegetative yeast (FEBS 10301) *K. Winkler, I. Kienle, M. Burgert, J.-C. Wagner, H. Holzer* 269

Choleratoxin ADP-ribosylates transducin only when it is bound to photoexcited rhodopsin and depleted of its nucleotide (FEBS 10268) *F. Bornancin, M. Chabre* 273

Endonuclease (R) subunits of type-I and type-III restriction-modification enzymes contain a helicase-like domain (FEBS 10271) *A.E. Gorbalenya, E.V. Koonin* 277

Beef-heart mitochondrial F_1-ATPase can use endogenous bound phosphate to synthesize ATP in dimethyl sulfoxide (FEBS 10272) *S. Beharry, P.D. Bragg* 282

A Saporin-6 cDNA containing a precursor sequence coding for a carboxyl-terminal extension (FEBS 10274) *L. Benatti, G. Nitti, M. Solinas, B. Valsasina, A. Vitale, A. Ceriotti, M.R. Soria* 285

Structure and organization of the gene encoding rat *S*-adenosylmethionine decarboxylase (FEBS 10276) *A. Pulkka, R. Ihalainen, J. Aatsinki, A. Pajunen* 289

Direct measurement of the equilibrium between glutathione and dithiothreitol by high performance liquid chromatography (FEBS 10260) *M.-H. Chau, J.W. Nelson* 296

Overexpression of alcohol oxidase in *Pichia pastoris* (FEBS 10262) *M.J. De Hoop, J. Cregg, I. Keizer-Gunnink, K. Sjollema, M. Veenhuis, G. Ab* 299

Saccharomyces cerevisiae elongation factor 2 is phosphorylated by an endogenous kinase (FEBS 10263) *M.G. Donovan, J.W. Bodley* 303

Crystal structure of hevein at 2.8 Å resolution (FEBS 10267) *A. Rodríguez-Romero, K.G. Ravichandran, M. Soriano-Garcia* 307

Measurements of cytoplasmic free Ca^{2+} concentration in human pancreatic islets and insulinoma cells (FEBS 10273) *H. Kindmark, M. Köhler, T. Nilsson, P. Arkhammar, K.-L. Wiechel, P. Rorsman, S. Efendić, P.-O. Berggren* 310

Functional properties of human thyroid hormone receptor β1 overexpressed using baculovirus (FEBS 10275) *T.N. Collingwood, M. Sydenham, M.J. Page, V.K.K. Chatterjee* 315

Glutamic acid-112 of the A subunit of heat-labile enterotoxin from enterotoxigenic *Escherichia coli* is important for ADP-ribosyltransferase activity (FEBS 10277) *T. Tsuji, T. Inoue, A. Miyama, M. Noda* 319

Identification and partial purification of GTPase-activating proteins from yeast and mammalian cells that preferentially act on Ypt1/Rab1 proteins (FEBS 10280) *T.J. Tan, P. Vollmer, D. Gallwitz* 322

Flash-photolysis studies of the electron transfer from genetically modified spinach plastocyanin to photosystem I (FEBS 10278) *M. Nordling, K. Sigfridsson, S. Young, L.G. Lundberg, Ö. Hansson* 327

Purification and spectral characterization of a *b*-type cytochrome from the plasma membrane of the archaebacterium *Sulfolobus acidocaldarius* (FEBS 10279) *M. Becker, G. Schäfer* 331

Interaction of mastoparan with the low molecular mass GTP-binding proteins rho/rac (FEBS 10282) *G. Koch, B. Haberman, C. Mohr, I. Just, K. Aktories* 336

Molecular mechanism of protein kinase C modulation of sodium channel α-subunits expressed in *Xenopus* oocytes (FEBS 10283) *W. Schreibmayer, N. Dascal, I. Lotan, M. Wallner, L. Weigl* 341

Isolation and characterization of active N-terminal truncated apo- and holoenzyme of mammalian liver tyrosine aminotransferase (FEBS 10284) *B. Lorber, J.-B. Dietrich, D. Kern* 345

Lipid–peptide interactions between fragments of the transit peptide of ribulose-1,5-bisphosphate carboxylase/oxygenase and chloroplast membrane lipids (FEBS 10285) *R. Van 't Hof, R.A. Demel, K. Keegstra, B. De Kruijff* 350

A method to study the rapid phosphorylation-related modulation of neutral trehalase activity by temperature shifts in yeast (FEBS 10286) *C. De Virgilio, N. Bürckert, T. Boller, A. Wiemken* 355

Heat shock increases turnover of 90 kDa heat shock protein phosphate groups in HeLa cells (FEBS 10287) *V. Legagneux, M. Morange, O. Bensaude* 359

Effects of 17-hydroxywortmannin on serine/threonine-protein kinases in human blood platelets (FEBS 10288) *M. Kocher, K.J. Clemetson* 363

Identification of the metal coordinating residues in the DNA binding domain of the glucocorticoid receptor by ^{113}Cd-^{1}H heteronuclear NMR spectroscopy (FEBS 10289) *E. Kellenbach, B.A. Maler, K.R. Yamamoto, R. Boelens, R. Kaptein* 367

Methyl-coenzyme M reductase preparations with high specific activity from H_2-preincubated cells of *Methanobacterium thermoautotrophicum* (FEBS 10290) *S. Rospert, R. Böcher, S.P.J. Albracht, R.K. Thauer* 371

Errata and Corrigenda 376

Author index to volume 291 378

Contents to volume 291 383